

Claim Amendments

1-143. (canceled)

1 144. (Currently amended) A demulsifier composition to prevent or resolve  
2 downhole emulsions in aqueous solutions, said demulsifier composition consisting  
3 essentially of:

4 a demulsifying amount of one or more salts of alkylaryl sulfonic acid[[,]]  
5 effective to perform a function selected from the group consisting of  
6 demulsifying an emulsion in an aqueous solution and preventing  
7 formation of an emulsion in an aqueous solution;  
8 a first solubilizing quantity of a non-ionic surfactant effective to solubilize said  
9 demulsifier in said aqueous solution, said non-ionic surfactant comprising  
10 an alkoxyated compound having the following general formula:



11  
12 wherein

13  
14  $R^6$  is an alkyl group having from about 8 to about 16 carbon atoms;

15  $R^7$  independently is selected from the group consisting of hydrogen and  
16 alkyl groups having from about 1 to about 6 carbon atoms;

17  $R^8$  is selected from the group consisting of hydrogen and alkyl groups  
18 having from about 1 to about 6 carbon atoms;

19  $x$  is from about 2 to about 20; and

20 a second solubilizing quantity of a mutual organic solvent selected from the group  
21 consisting of water soluble glycol ethers, water soluble amides, water  
22 soluble ketones, and water soluble alcohols selected from the group

23 consisting of methanol, ethanol, 1-propanol, and 2-propanol, said mutual  
24 organic solvent being effective to solubilize said demulsifier and said non-  
25 ionic surfactant to produce said demulsifier composition.

1 145. (previously presented) The composition of claim 144 wherein said  
2 aqueous solution is a brine.

146. (canceled)

1 147. (previously presented) The composition of claim 144 wherein  
2 said demulsifying amount of said demulsifier is from about 1 wt.% to about 40  
3 wt.%;  
4 said first solubilizing quantity of said non-ionic surfactant is from about 1 wt.% to  
5 about 10 wt.%; and  
6 said second solubilizing quantity of said mutual organic solvent is from about 60  
7 to about 98 wt.%.

1 148. (previously presented) The composition of claim 144 wherein  
2 said demulsifying amount of said demulsifier is from about 2 wt.% to about 10  
3 wt.%; and  
4 said second solubilizing quantity of said mutual organic solvent is from about 85  
5 to about 95 wt.%.

1 149. (previously presented) The composition of claim 145 wherein  
2 said demulsifying amount of said demulsifier is from about 1 wt.% to about 40  
3 wt.%;  
4 said first solubilizing quantity of said non-ionic surfactant is from about 1 wt.% to  
5 about 10 wt.%; and

6 said second solubilizing quantity of said mutual organic solvent is from about 60  
7 to about 98 wt.%.

1 150. (previously presented) The composition of claim 145 wherein  
2 said demulsifying amount of said demulsifier is from about 2 wt.% to about 10  
3 wt.%; and

4 said second solubilizing quantity of said mutual organic solvent is from about 85  
5 to about 95 wt.%.

1 151. (Canceled).

1 152. (Canceled).

1 153. (previously presented) The demulsifier composition of claim 144 wherein  
2 said mutual organic solvent is selected from the group consisting of water soluble  
3 propylene glycol ethers, N,N-dimethylformamide, N,N-dimethylacetamide, 1-methyl-2-  
4 pyrrolidinone, acetone, methanol, ethanol, 1-propanol and 2-propanol.

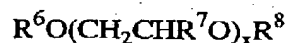
1 154. (Previously presented) The demulsifier composition of claim 144 wherein  
2 said demulsifier comprises an amine salt of said alkaryl sulfonic acid.

155. (Canceled).

1 156. (Previously presented) A demulsifier composition consisting essentially  
2 of:

3 a demulsifying amount of one or more salts of alkaryl sulfonic acid effective to  
4 perform a function selected from the group consisting of demulsifying an  
5 emulsion in an aqueous solution and preventing formation of an emulsion  
6 in an aqueous solution;

7 a first solubilizing quantity of a non-ionic surfactant effective to solubilize said  
8 demulsifier in said aqueous solution, said non-ionic surfactant comprising  
9 an alkoxyated compound having the following general formula:



11 wherein

12  $R^6$  is an alkyl group having from about 8 to about 16 carbon atoms;

13  $R^7$  independently is selected from the group consisting of hydrogen and  
14 alkyl groups having from about 1 to about 6 carbon atoms;

15  $R^8$  is selected from the group consisting of hydrogen and alkyl groups  
16 having from about 1 to about 6 carbon atoms;

17 x is from about 2 to about 20; and

18 a second solubilizing quantity of a mutual organic solvent comprising one or more  
19 water-soluble alkanol ethers having the formula



22 wherein

23  $R^{10}$ ,  $R^{11}$  and  $R^{12}$  independently are selected from the group consisting of  
24 hydrogen and alkyl groups having from about 1 to about 6 carbon  
25 atoms; and

26 z is from about 1 to about 22.

27 157. (previously presented) The composition of claim 156 wherein

1  $R^{10}$  and  $R^{11}$  are hydrogen;

3 R<sup>12</sup> is selected from the group consisting of methyl, ethyl, propyl, iso-propyl, and  
4 butyl groups;

5 z is from about 1 to about 8.

1 158. (previously presented) The composition of claim 156 wherein said  
2 mutual organic solvent is selected from the group consisting of ethylene glycol  
3 monobutyl ether (EGMBE) and ethylene glycol monomethyl ether (EGMME).

1 159. (previously presented) The composition of claim 156 wherein said  
2 demulsifier is a 2-propanamine salt of dodecyl benzene sulfonic acid.

1 160. (previously presented) The composition of claim 156 wherein said non-  
2 ionic surfactant has a hydrophilic-lipophilic balance (HLB) value of from about 5 to  
3 about 20.

1 161. (previously presented) The composition of claim 156 wherein said non-  
2 ionic surfactant has a HLB value of about 8 to about 15.

1 162. (previously presented) The composition of claim 156 wherein  
2 said demulsifying amount of said demulsifier is from about 1 wt.% to about 40  
3 wt.%;  
4 said first solubilizing quantity of said non-ionic surfactant is from about 1 wt.% to  
5 about 10 wt.%; and  
6 said second solubilizing quantity of said mutual organic solvent is from about 60  
7 to about 98 wt.%.

1 163. (previously presented) The composition of claim 156 wherein  
2 said demulsifying amount of said demulsifier is from about 2 wt.% to about 10  
3 wt.%; and

4 said second solubilizing quantity of said mutual organic solvent is from about 85  
5 to about 95 wt.%.

1 164. (previously presented) The composition of claim 157 wherein  
2 said demulsifying amount of said demulsifier is from about 1 wt.% to about 40  
3 wt.%;

4 said first solubilizing quantity of said non-ionic surfactant is from about 1 wt.% to  
5 about 10 wt.%; and

6 said second solubilizing quantity of said mutual organic solvent is from about 60  
7 to about 98 wt.%.

1 165. (previously presented) The composition of claim 157 wherein  
2 said demulsifying amount of said demulsifier is from about 2 wt.% to about 10  
3 wt.%; and

4 said second solubilizing quantity of said mutual organic solvent is from about 85  
5 wt.% to about 95 wt.%.

1 166. (previously presented) The composition of claim 158 wherein  
2 said demulsifying amount of said demulsifier is from about 1 wt.% to about 40  
3 wt.%;  
4 said first solubilizing quantity of said non-ionic surfactant is from about 1 wt.% to  
5 about 10 wt.%; and  
6 said second solubilizing quantity of said mutual organic solvent is from about 60  
7 to about 98 wt.%.

1 167. (previously presented) The composition of claim 158 wherein

2 said demulsifying amount of said demulsifier is from about 2 wt.% to about 10

3 wt.%; and

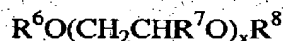
4 said second solubilizing quantity of said mutual organic solvent is from about 85

5 to about 95 wt.%.

1 168. (Previously presented) A demulsifier composition to prevent or resolve  
2 downhole emulsions in aqueous solutions, said demulsifier composition consisting  
3 essentially of:

4 a demulsifying amount of a 2-propanamine salt of dodecyl benzene sulfonic acid  
5 effective to perform a function selected from the group consisting of  
6 demulsifying an emulsion in an aqueous solution and preventing  
7 formation of an emulsion in an aqueous solution;

8 a first solubilizing quantity of an alcohol ethoxylate having the following general  
9 formula



10  
11 wherein

12  $R^6$  is an alkyl group having from about 8 to about 16 carbon atoms;

13  $R^7$  independently is selected from the group consisting of hydrogen and  
14 alkyl groups having from about 1 to about 6 carbon atoms;

15  $R^8$  is selected from the group consisting of hydrogen and alkyl groups  
16 having from about 1 to about 6 carbon atoms;

17 x is from about 2 to about 20; and

18 a second solubilizing quantity of a mutual organic solvent selected from the group  
19 consisting of ethylene glycol monobutyl ether (EGMBE) and ethylene  
20 glycol monomethyl ether (EGMME).

1 169. (previously presented) The composition of claim 168 wherein  
2 R<sup>6</sup> is a linear alkyl group having from about 14 to about 15 carbon atoms; and  
3 x is from about 5 to about 10.

1 170. (previously presented) The composition of claim 168 wherein said  
2 aqueous solution is a brine.

1 171. (previously presented) The composition of claim 169 wherein said  
2 aqueous solution is a brine.

1 172. (previously presented) The composition of claim 168 wherein  
2 said demulsifying amount of said 2-propanamine salt of dodecyl benzene sulfonic  
3 acid is from about 1 wt.% to about 40 wt.%;  
4 said first solubilizing quantity of said alcohol ethoxylate is from about 1 wt.% to  
5 about 10 wt.%; and  
6 said second solubilizing quantity of said mutual organic solvent is from about 60  
7 wt.% to about 98 wt.%.

1 173. (previously presented) The composition of claim 168 wherein  
2 said demulsifying amount of said 2-propanamine salt of dodecyl benzene sulfonic  
3 acid is from about 2 wt.% to about 10 wt.%; and  
4 said second solubilizing quantity of said mutual organic solvent is from about 85  
5 wt.% to about 95 wt.%.

1 174. (previously presented) The composition of claim 169 wherein



2 said demulsifying amount of said 2-propanamine salt of dodecyl benzene sulfonic  
3 acid is from about 1 wt.% to about 40 wt.%;  
4 said first solubilizing quantity of said alcohol ethoxylate is from about 1 wt.% to  
5 about 10 wt.%; and  
6 said second solubilizing quantity of said mutual organic solvent is from about 60  
7 wt.% to about 98 wt.%.

1 175. (previously presented) The composition of claim 169 wherein  
2 said demulsifying amount of said 2-propanamine salt of dodecyl benzene sulfonic  
3 acid is from about 2 wt.% to about 10 wt.%; and  
4 said second solubilizing quantity of said mutual organic solvent is from about 85  
5 wt.% to about 95 wt.%.

1 176. (Currently amended) A demulsifier composition to prevent or resolve  
2 downhole emulsions in aqueous solutions, said demulsifier composition consisting  
3 essentially of:

4 a demulsifying amount of one or more salts of alkylaryl sulfonic acid[[,  
5 ]], effective to perform a function selected from the group consisting of  
6 demulsifying an emulsion in an aqueous solution and preventing  
7 formation of an emulsion in an aqueous solution;  
8 a first solubilizing quantity of a non-ionic surfactant selected from the group  
9 consisting of polyoxyalcohols, tall oil ethoxyethylate having from about 6  
10 to about 15 moles of ethylene oxide, ethoxylated nonylphenols, and  
11 phosphated fatty alcohol ethoxylates having from about 2 to about 10  
12 moles of ethoxylation; and

a second solubilizing quantity of a mutual organic solvent selected from the group consisting of water soluble glycol ethers, water soluble amides, water soluble ketones, and water soluble alcohols selected from the group consisting of methanol, ethanol, 1-propanol, and 2-propanol, said mutual organic solvent being effective to solubilize said demulsifier and said non-ionic surfactant to produce said demulsifier composition.

177. (Previously presented) A brine comprising:

said brine, selected from the group consisting of a drilling fluid, a workover fluid, and a completion fluid, said brine comprising:

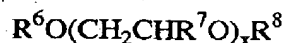
a demulsifying amount of one or more salts of alkylaryl sulfonic acid effective to perform a function selected from the group consisting of demulsifying an emulsion in said aqueous solution and preventing formation of an emulsion in said aqueous solution;

a first solubilizing quantity of a non-ionic surfactant effective to solubilize said demulsifier in said aqueous solution;

a second solubilizing quantity of a mutual organic solvent selected from the group consisting of water soluble glycol ethers, water soluble amides, water soluble ketones, and water soluble alcohols selected from the group consisting of methanol, ethanol, 1-propanol, and 2-propanol, said mutual organic solvent being effective to solubilize said demulsifier and said non-ionic surfactant to produce said brine.

178. (previously presented) The brine of claim 177 wherein said non-ionic surfactant comprises an alkoxylated compound having the following general formula:

3



4

5

wherein

6

$R^6$  is an alkyl group having from about 8 to about 16 carbon atoms;

7

$R^7$  independently is selected from the group consisting of hydrogen and

8

alkyl groups having from about 1 to about 6 carbon atoms;

9

$R^8$  is selected from the group consisting of hydrogen and alkyl groups

10

having from about 1 to about 6 carbon atoms;

11

x is from about 2 to about 20.

1

179. (previously presented) The brine of claim 177 wherein said non-ionic surfactant has an HLB of from about 8 to about 15.

2

1

180. (previously presented) The brine of claim 178 wherein said non-ionic surfactant has an HLB of from about 8 to about 15.

2

1

181. (previously presented) The brine of claim 177 wherein said mutual organic solvent is selected from the group consisting of water soluble propylene glycol ethers, N,N-dimethylformamide, N,N-dimethylacetamide, 1-methyl-2-pyrrolidinone, acetone, methanol, ethanol, 1-propanol and 2-propanol.

4

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182. (previously presented) The brine of claim 178 wherein said mutual organic solvent is selected from the group consisting of water soluble propylene glycol ethers, N,N-dimethylformamide, N,N-dimethylacetamide, 1-methyl-2-pyrrolidinone, acetone, methanol, ethanol, 1-propanol and 2-propanol.

4

1

183. (previously presented) The brine of claim 179 wherein said mutual organic solvent is selected from the group consisting of water soluble propylene glycol

2

3 ethers, N,N-dimethylformamide, N,N-dimethylacetamide, 1-methyl-2-pyrrolidinone,  
4 acetone, methanol, ethanol, 1-propanol and 2-propanol.

1 184. (previously presented) The brine of claim 180 wherein said mutual  
2 organic solvent is selected from the group consisting of water soluble propylene glycol  
3 ethers, N,N-dimethylformamide, N,N-dimethylacetamide, 1-methyl-2-pyrrolidinone,  
4 acetone, methanol, ethanol, 1-propanol and 2-propanol.

1 185. (previously presented) The brine of claim 177 wherein said non-ionic  
2 surfactant is selected from the group consisting of polyoxyalcohols, tall oil  
3 ethoxyethylate having from about 6 to about 15 moles of ethylene oxide, ethoxylated  
4 nonylphenols, and phosphated fatty alcohol ethoxylates having from about 2 to about 10  
5 moles of ethoxylation.

186. (Canceled).

1 187. (previously presented) The brine of claim 179 wherein said non-ionic  
2 surfactant is selected from the group consisting of polyoxyalcohols, tall oil  
3 ethoxyethylate having from about 6 to about 15 moles of ethylene oxide, ethoxylated  
4 nonylphenols, and phosphated fatty alcohol ethoxylates having from about 2 to about 10  
5 moles of ethoxylation.

188. (Canceled).

1 189. (previously presented) The brine of claim 181 wherein said non-ionic  
2 surfactant is selected from the group consisting of polyoxyalcohols, tall oil  
3 ethoxyethylate having from about 6 to about 15 moles of ethylene oxide, ethoxylated  
4 nonylphenols, and phosphated fatty alcohol ethoxylates having from about 2 to about 10  
5 moles of ethoxylation.

190. (Canceled).

1 191. (previously presented) The brine of claim 183 wherein said non-ionic  
2 surfactant is selected from the group consisting of polyoxyalcohols, tall oil  
3 ethoxyethylate having from about 6 to about 15 moles of ethylene oxide, ethoxylated  
4 nonylphenols, and phosphated fatty alcohol ethoxylates having from about 2 to about 10  
5 moles of ethoxylation.

192. (Canceled).

1 193. (previously presented) The brine of claim 177 wherein said demulsifier  
2 comprises an amine salt of said alkylaryl sulfonic acid.

1 194. (previously presented) The brine of claim 178 wherein said demulsifier  
2 comprises an amine salt of said alkylaryl sulfonic acid.

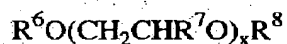
1 195. (previously presented) The brine of claim 183 wherein said demulsifier  
2 comprises an amine salt of said alkylaryl sulfonic acid.

1 196. (previously presented) The brine of claim 184 wherein said demulsifier  
2 comprises an amine salt of said alkylaryl sulfonic acid.

1 197. (previously presented) The brine of claim 191 wherein said demulsifier  
2 comprises an amine salt of said alkylaryl sulfonic acid.

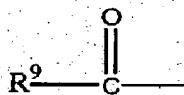
1 198. (currently amended) The brine of claim ~~[[192]]~~ 185 wherein said  
2 demulsifier comprises an amine salt of said alkylaryl sulfonic acid.

1 199. (previously presented) The brine of claim 177 wherein said non-ionic  
2 surfactant comprises an alkoxylated compound having a hydrophilic-lipophilic balance  
3 (HLB) value of from about 5 to about 20 and having the following general formula:



wherein

$R^6$  independently is selected from the group consisting of hydrogen, acyl groups and alkyl groups having from about 1 to about 22 carbon atoms, said acyl groups having the following general formula:



wherein  $R^9$  is an alkyl group having from about 1 to about 24 carbon atoms;

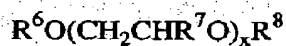
$R^7$  independently is selected from the group consisting of hydrogen and alkyl groups having from about 1 to about 6 carbon atoms;

$R^8$  is selected from the group consisting of hydrogen and alkyl groups having from about 1 to about 6 carbon atoms;

and

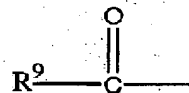
x is from about 1 to about 20.

200. (previously presented) The brine of claim 183 wherein said non-ionic surfactant comprises an alkoxyated compound having a hydrophilic-lipophilic balance (HLB) value of from about 5 to about 20 and having the following general formula:



wherein

R<sup>6</sup> independently is selected from the group consisting of hydrogen, acyl groups and alkyl groups having from about 1 to about 22 carbon atoms, said acyl groups having the following general formula:



wherein R<sup>9</sup> is an alkyl group having from about 1 to about 24 carbon atoms;

R<sup>7</sup> independently is selected from the group consisting of hydrogen and alkyl groups having from about 1 to about 6 carbon atoms;

R<sup>8</sup> is selected from the group consisting of hydrogen and alkyl groups having from about 1 to about 6 carbon atoms; and

x is from about 1 to about 20.

201. (Canceled).

202. (previously presented) The brine of claim 177 wherein said mutual organic solvent comprises one or more water soluble alkanol ethers having the formula



wherein

R<sup>10</sup>, R<sup>11</sup> and R<sup>12</sup> independently are selected from the group consisting of hydrogen and alkyl groups having from about 1 to about 6 carbon atoms; and

z is from about 1 to about 22.

1           203. (Currently amended) The brine of claim ~~[[183]]~~ 178 wherein said mutual  
2 organic solvent comprises one or more water soluble alkanol ethers having the formula



3  
4           wherein

5                    $R^{10}$ ,  $R^{11}$  and  $R^{12}$  independently are selected from the group consisting of  
6                   hydrogen and alkyl groups having from about 1 to about 6 carbon  
7                   atoms; and

8                   z is from about 1 to about 22.

1           204. (Currently amended) The brine of claim ~~[[198]]~~ 185 wherein said mutual  
2 organic solvent comprises one or more water soluble alkanol ethers having the formula



3  
4           wherein

5                    $R^{10}$ ,  $R^{11}$  and  $R^{12}$  independently are selected from the group consisting of  
6                   hydrogen and alkyl groups having from about 1 to about 6 carbon  
7                   atoms; and

8                   z is from about 1 to about 22.

1           205. (Canceled).

1           206. (previously presented) The brine of claim 177 wherein said mutual  
2 organic solvent is selected from the group consisting of ethylene glycol monobutyl ether  
3 (EGMBE) and ethylene glycol monomethyl ether (EGMME).



1           207. (currently amended) The brine of claim [[183]] 179 wherein said mutual  
2 organic solvent is selected from the group consisting of ethylene glycol monobutyl ether  
3 (EGMBE) and ethylene glycol monomethyl ether (EGMME).

1           208. (previously presented) The brine of claim 198 wherein said mutual  
2 organic solvent is selected from the group consisting of ethylene glycol monobutyl ether  
3 (EGMBE) and ethylene glycol monomethyl ether (EGMME).

1           209-210. (Canceled).

1           211. (previously presented) The brine of claim 156 wherein said demulsifier  
2 comprises an amine salt of said alkylaryl sulfonic acid.

1           212. (Canceled).

1           213. (previously presented) The brine of claim 176 wherein said demulsifier  
2 comprises an amine salt of said alkylaryl sulfonic acid.

1           214. (new) The composition of claim 176 wherein said aqueous solution is a  
2 brine.

1           215. (new) The composition of claim 176 wherein  
2 said demulsifying amount of said demulsifier is from about 1 wt.% to about 40  
3 wt.%;  
4 said first solubilizing quantity of said non-ionic surfactant is from about 1 wt.% to  
5 about 10 wt.%; and  
6

6 said second solubilizing quantity of said mutual organic solvent is from about 60  
7 to about 98 wt.%.

1 216. (new) The composition of claim 176 wherein  
2 said demulsifying amount of said demulsifier is from about 2 wt.% to about 10  
3 wt.%; and

4 said second solubilizing quantity of said mutual organic solvent is from about 85  
5 to about 95 wt.%.

1 217. (new) The composition of claim 214 wherein  
2 said demulsifying amount of said demulsifier is from about 1 wt.% to about 40  
3 wt.%;

4 said first solubilizing quantity of said non-ionic surfactant is from about 1 wt.% to  
5 about 10 wt.%; and

6 said second solubilizing quantity of said mutual organic solvent is from about 60  
7 to about 98 wt.%.

1 218. (new) The composition of claim 214 wherein  
2 said demulsifying amount of said demulsifier is from about 2 wt.% to about 10  
3 wt.%; and

4 said second solubilizing quantity of said mutual organic solvent is from about 85  
5 to about 95 wt.%.

1 219. (new) The demulsifier composition of claim 176 wherein said mutual  
2 organic solvent is selected from the group consisting of water soluble propylene glycol  
3 ethers, N,N-dimethylformamide, N,N-dimethylacetamide, 1-methyl-2-pyrrolidinone,  
4 acetone, methanol, ethanol, 1-propanol and 2-propanol.

1        220. (new) The demulsifier composition of claim 176 wherein said demulsifier  
2 comprises an amine salt of said alkylaryl sulfonic acid.

1        221. (new) The demulsifier composition of claim 219 wherein said demulsifier  
2 comprises an amine salt of said alkylaryl sulfonic acid.

1        222. (new) The demulsifier composition of claim 214 wherein said mutual  
2 organic solvent is selected from the group consisting of water soluble propylene glycol  
3 ethers, N,N-dimethylformamide, N,N-dimethylacetamide, 1-methyl-2-pyrrolidinone,  
4 acetone, methanol, ethanol, 1-propanol and 2-propanol.

1        223. (new) The demulsifier composition of claim 214 wherein said demulsifier  
2 comprises an amine salt of said alkylaryl sulfonic acid.

1        224. (new) The demulsifier composition of claim 222 wherein said demulsifier  
2 comprises an amine salt of said alkylaryl sulfonic acid.

1        225. (new) The brine of claim 176 wherein said non-ionic surfactant has an  
2 HLB of from about 8 to about 15.

1        226. (new) The brine of claim 214 wherein said non-ionic surfactant has an  
2 HLB of from about 8 to about 15.

1        227. (new) The brine of claim 176 wherein said mutual organic solvent  
2 comprises one or more water soluble alkanol ethers having the formula



3

4

wherein

5

$R^{10}$ ,  $R^{11}$  and  $R^{12}$  independently are selected from the group consisting of

6

hydrogen and alkyl groups having from about 1 to about 6 carbon

7

atoms; and

8 z is from about 1 to about 22.

1 228. (new) The brine of claim 214 wherein said mutual organic solvent  
2 comprises one or more water soluble alkanol ethers having the formula



3

4 wherein

5  $R^{10}$ ,  $R^{11}$  and  $R^{12}$  independently are selected from the group consisting of  
6 hydrogen and alkyl groups having from about 1 to about 6 carbon  
7 atoms; and

8 z is from about 1 to about 22.

1 229. (new) The brine of claim 220 wherein said mutual organic solvent  
2 comprises one or more water soluble alkanol ethers having the formula



3

4 wherein

5  $R^{10}$ ,  $R^{11}$  and  $R^{12}$  independently are selected from the group consisting of  
6 hydrogen and alkyl groups having from about 1 to about 6 carbon  
7 atoms; and

8 z is from about 1 to about 22.

1 230. (new) The brine of claim 223 wherein said mutual organic solvent  
2 comprises one or more water soluble alkanol ethers having the formula



3

4 wherein

5            $R^{10}$ ,  $R^{11}$  and  $R^{12}$  independently are selected from the group consisting of  
6           hydrogen and alkyl groups having from about 1 to about 6 carbon  
7           atoms; and  
8           z is from about 1 to about 22.

1           231. (new) The brine of claim 224 wherein said mutual organic solvent  
2           comprises one or more water soluble alkanol ethers having the formula



3  
4           wherein

5            $R^{10}$ ,  $R^{11}$  and  $R^{12}$  independently are selected from the group consisting of  
6           hydrogen and alkyl groups having from about 1 to about 6 carbon  
7           atoms; and  
8           z is from about 1 to about 22.

1           232. (new) The brine of claim 176 wherein said mutual organic solvent is  
2           selected from the group consisting of ethylene glycol monobutyl ether (EGMBE) and  
3           ethylene glycol monomethyl ether (EGMME).

1           233. (new) The brine of claim 214 wherein said mutual organic solvent is  
2           selected from the group consisting of ethylene glycol monobutyl ether (EGMBE) and  
3           ethylene glycol monomethyl ether (EGMME).

1           234. (new) The brine of claim 220 wherein said mutual organic solvent is  
2           selected from the group consisting of ethylene glycol monobutyl ether (EGMBE) and  
3           ethylene glycol monomethyl ether (EGMME).

- 1           235. (new) The brine of claim 223 wherein said mutual organic solvent is
- 2   selected from the group consisting of ethylene glycol monobutyl ether (EGMBE) and
- 3   ethylene glycol monomethyl ether (EGMME).